# JESSAMINE COUNTY

## (Jessamine County Water Service Area Map)

- Estimated 1999 population of 36,400--90% on public water
- Estimated 2020 population of 46,500--92% on public water
- 260 miles of water lines, with plans for 56 additional miles
- Estimated funding needs for public water 2000-2005--\$7,798,000
- Estimated funding needs for public water 2006-2020--\$9,707,000

Jessamine County had an estimated population of 36,420 (14,103 households) in 1999 with a projected population of 46,535 (19,709 households) in 2020. Public water is provided to about 90 percent of the county's residents. In areas of the county not served by public water, about 20 percent of the households rely on private domestic wells and 80 percent of the households rely on other sources. About 360 customers will be added to public water service through new line extensions in 2000-2020.

#### Estimated Costs - Proposed Projects, 2000-2005

COUNTY/System		New		Rehab	Source	Treatment	Tanks/	Total
		Customers					Pumps	
	Miles	Number	Cost in \$1000	In	in	in \$1000	in	in \$1000
				\$1000	\$1000		\$1000	
JESSAMINE								,
Wilmore				325	200	2,100		2,625
Jessamine-South Elkorn W/D	39.0	247	1,978				800	2,778
Nicholasville				1,066				1,066
Jessamine Co. W/D #1				179			1,150	1,329
TOTAL	39.0	247	1,978	1,570	200	2,100	1,950	7,798

#### Estimated Costs - Proposed Projects, 2006-2020

COUNTY/System		New		Rehab	Source	Treatment	Tanks/	Total
		Customers					Pumps	
	Miles	Number	Cost in \$1000	in \$1000				
JESSAMINE								
Wilmore				800				800
Jessamine-South Elkorn W/D	17	57	744					744
Nicholasville				1,313		5,500	1,100	7,913
Jessamine Co. W/D #1				250				250
Total	17	57	744	2,363		5,500	1,100	9,707

### **PUBLIC WATER SYSTEMS**

Jessamine County is served by 5 community water systems: 2 municipal, Wilmore Water Works and Nicholasville Water Department; 2 water districts, Jessamine County Water

# WATER SERVICE AREAS JESSAMINE COUNTY Kentucky

## Prepared By: Water Resource Development Commission

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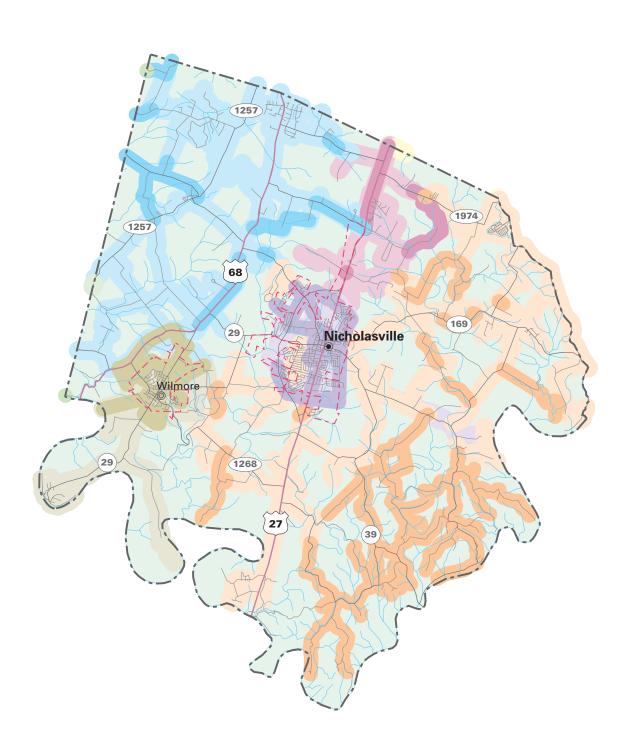








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#### **WATER SERVICE STATUS BY OWNER**



District #1 and Jessamine-South Elkhorn Water District; and 1 private, the Spears Water Company.

## **WILMORE MUNICIPAL WATER WORKS**

PWSID:	0570010
System Type:	COMMUNITY
Owner Type:	
Surface Source:	KENTUCKY RIVER POOL 6
Purchase Source:	
Well Source:	
Sells Water to:	
Treatment Plant Capacity (MGD):	1.00
Percent Daily Average Production:	
Total Tank Storage Capacity (gallons):	
Total Service Connections:	1,724.00
Number of Employees:	0.00
Treatment Operator Class:	2D
Distribution Operator Class:	3A
Customer Rate for 1,000 Gallons:	Not available
O/M costs 1997:	Not available
O/M costs per Service Connection:	Not available
Net Revenue 1997:	Not available
Total Water Produced 1997 (gallons):	Not available
Water Sold 1997 (gallons):	Not available
Unaccounted-for Water 1997 (%):	Not available
<b>JESSAMINE COUNTY WATER</b>	R DISTRICT #1
PWSID:	0570214
PWSID:	0570214 COMMUNITY
PWSID: System Type: Owner Type: Surface Source: Purchase Source: Well Source: Sells Water to:	0570214 COMMUNITY WATER DISTRICT
PWSID: System Type: Owner Type: Surface Source: Purchase Source: Well Source: Sells Water to: Treatment Plant Capacity (MGD):	0570214 COMMUNITY WATER DISTRICT
PWSID: System Type: Owner Type: Surface Source: Purchase Source: Well Source: Sells Water to: Treatment Plant Capacity (MGD): Percent Daily Average Production:	0570214
PWSID: System Type: Owner Type: Surface Source: Purchase Source: Well Source: Sells Water to: Treatment Plant Capacity (MGD):	
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# **JESSAMINE-SOUTH ELKHORN WATER DISTRICT**

PWSID:
Treatment Plant Capacity (MGD): 0.00 Percent Daily Average Production: 0.00
Total Tank Storage Capacity (gallons):
Total Service Connections:
Number of Employees: 10.00
Treatment Operator Class:
Distribution Operator Class:
Customer Rate for 1,000 Gallons:
O/M costs 1997:514,090.00
O/M costs per Service Connection:
Net Revenue 1997:
Total Water Produced 1997 (gallons):
Water Sold 1997 (gallons):
Unaccounted-for Water 1997 (%):
NICHOLASVILLE MUNICIPAL WATER DEPARTMENT
PWSID:
System Type:
Owner Type:
Surface Source: KENTUCKY RIVER POOL 8
Purchase Source:
Purchase Source: Well Source:
Purchase Source: Well Source: Sells Water to:
Purchase Source: Well Source: Sells Water to: Treatment Plant Capacity (MGD):
Purchase Source: Well Source: Sells Water to: Treatment Plant Capacity (MGD):
Purchase Source: Well Source: Sells Water to: Treatment Plant Capacity (MGD):
Purchase Source: Well Source: Sells Water to: Treatment Plant Capacity (MGD): 6.00 Percent Daily Average Production: 47.00 Total Tank Storage Capacity (gallons): 750,000.00 Total Service Connections: 6,492.00
Purchase Source: Well Source: Sells Water to: Treatment Plant Capacity (MGD): 6.00 Percent Daily Average Production: 47.00 Total Tank Storage Capacity (gallons): 750,000.00 Total Service Connections: 6,492.00 Number of Employees: 0.00
Purchase Source: Well Source: Sells Water to: Treatment Plant Capacity (MGD): 6.00 Percent Daily Average Production: 47.00 Total Tank Storage Capacity (gallons): 750,000.00 Total Service Connections: 6,492.00 Number of Employees: 0.00 Treatment Operator Class: 3E
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Surface Source: Purchase Source: Well Source: Sells Water to: Number of Employees: 5.00 **Distribution Operator Class:** Customer Rate for 1,000 Gallons: 4.18 

#### PRIVATE DOMESTIC SYSTEMS

About 3,500 residents of Jessamine County rely on private domestic water supplies: 700 on wells, and 2,800 on other sources.

In the Kentucky River, South Fork of Elkhorn Creeks, Hickman Creek and Jessamine Creek and their major tributaries, most drilled wells in the valleys will produce enough water for a domestic supply at depths of less than 100 feet. Wells located in the creek valleys and the uplands of the northern two-thirds of the county will produce enough water for a domestic supply except during dry weather. In the southern thirds of Jessamine County, which encompasses only 15% of the county, most drilled wells will not produce enough water for a dependable domestic supply except along drainage lines which may produce enough water except during dry weather.

Throughout the county ground water is hard or very hard and may contain salt or hydrogen sulfide, especially at depths greater than 100 feet.